

3



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/654,975	09/05/2003	Shigenobu Nakamura	117050	5670
25944	7590	02/01/2006	EXAMINER	
OLIFF & BERRIDGE, PLC			CHARLES, MARCUS	
P.O. BOX 19928				
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
			3682	
				DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/654,975	NAKAMURA, SHIGENOBU	
	Examiner Marcus Charles	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 December 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 6-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 6-9 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-06-2005.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: ____ .

DETAILED ACTION

This action is responsive to the amendment filed 12-06-2005, which has been entered.

Claims 6-9 are currently pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. (5,780,731) in view of Adachi et al. (6,201,310). Matsui et al. discloses a belt drive system driven by an internal combustion engine of an automotive vehicle, comprising a drive pulley (6) connected to a crankshaft; a plurality of driven pulleys (2, 3 and 5) connected to the system device; a belt (7) wound around the pulleys, the plurality of driven pulleys include a belt tensioner (9) that control the belt tension, and a generator having a generator pulley (4) that is engaged to the belt. Matsui et al. fail to disclose the system includes two generators. Adachi et al. disclose a drive system comprising first and second generators (21, 22) connected via a belt (23) so as to obtain high outputs for large electrical loads, to improve the installation freedom of the engine and to obtain crash safety. Adachi et al. also discloses that the pulley (22a) is a driving pulley and requires a clutch so as to disconnect the pulley from the shaft so as not to produce power when not required and to prevent slip and pulley (21a) may not require a clutch. Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to modify the device of Matsui et al. to include two generators and a clutch to at least one pulley in view of Adachi et al. to obtain high outputs for large electrical loads and to improve the installation freedom of the engine, to obtain crash safety and to disconnected the pulley from the shaft so as not to produce power when not required and to prevent slip.

In addition, note the diameter of the first generator is larger than that of the second generator such that the rotor such that the inertia moment of the rotor of the first generator is larger than that of the rotor of the second generator.

In claim 8, since one generator is larger than the other, it is apparent that the number of conductors in each slot of a stator of the first generator is larger than the number of conductors of disposed in each slot of the second generator.

In claim 9, Matsui et al. (5,780,731) in view of Adachi et al. (6,201,310) discloses the claimed invention above, except for the tensioner to be closer to the larger pulley of the larger generator. It would have been obvious to one of ordinary skill in the art at the time of the invention to place the tensioner closer to the larger generator, since the larger generator produces more power and torque, and would requires greater tension thus prevent belt slip and wear.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 and 4 of copending Application No. 10/648,389 in view of Adachi et al. (6,201,310). Copending Application No. 10/648,389 discloses the claimed invention except for one of the pulleys having a one-way clutch. Adachi et al. disclose that the pulley (22a) is a driving pulley and requires a clutch so as to disconnect the pulley from the shaft so as not produce power when not required and to prevent slip but pulley (21a) may not require a clutch. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Matsui et al. to include a clutch to at least one pulley in view of Adachi et al. to disconnect the pulley from the shaft so as not produce power when not required and to prevent slip.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

5. Applicant's arguments filed 12-06-2005 have been fully considered but they are not persuasive. Applicant contended that the prior art fails to disclose in whole or in combination every feature of the claimed invention. As stated in the office action, both Matsui et al. and Adachi et al. (6,201,310) clearly disclose an internal combustion engine having a belt drive system including a plurality of driven pulleys and an

automatic tensioner in combination with first and second generators. Applicant has not point out disagreements with the examiner's contentions. In addition, applicant has not discussed the references applied against the claims, explaining how the claims avoid the references or distinguish from them. In respect to the double patenting. The previous IDS filed by applicant, did not include the serial application number of the US application. The docket number is not sufficient to considered an IDS. Therefore, for reasons given above, the rejection is proper.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marcus Charles
Primary Examiner
Art Unit 3682
January 28, 2006